

Viking Use & Care Manual



Viking Range Corporation

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For product information

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or visit the Viking Web site at

vikingrange.com

Built-In Gas
Thermal-Convection Ovens

Congratulations

Your purchase of this product attests to the importance you place upon the quality and performance of the major appliances you use. With minimal care, as outlined in this guide, this product is designed to provide you with years of dependable service. Please take the few minutes necessary to learn the proper and efficient use and care of this quality product.

We appreciate your choosing a Viking Range Corporation product, and hope that you will again select our products for your other major appliance needs.

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Your complete satisfaction is our ultimate goal. If you have any questions or comments about this product, please contact the dealer from whom you purchased this product – or contact our consumer support center at 1-888-VIKING1.

We appreciate your choosing a Viking® Range Corporation product and hope that you will again select our products for your other major appliance needs. For more information about the complete selection of Viking products, contact your dealer or go to www.vikingrange.com

Warnings

WARNING

- Read all instructions before using the product.
- Install or locate the product only in accordance with the provided Installation Instructions.

WARNING

If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

-Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance
- Do not touch any electrical switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

WARNING

NEVER use this appliance as a space heater to heat or warm the room. Doing so may result in carbon monoxide poisoning and overheating of the oven. This is based on safety considerations.

WARNING

To avoid sickness and food waste when using automatic time baking:

- Do not use foods that will spoil while waiting for cooking to start, such as dishes with milk or eggs, cream soups, custards, fish, pork, poultry, or foods with stuffing.
- Any food that has to wait for cooking to start should be very cold or frozen before it is placed in the oven.
- Do not use foods containing baking powder or yeast when automatic time baking. They will not rise properly.
- Do not allow food to remain in the oven for more than two hours after the end of the cooking cycle.

WARNING

NEVER cover any slots, holes or passages in the oven bottom or cover an entire rack with materials such as aluminum foil. Doing so blocks air flow through the oven and may cause carbon monoxide poisoning. Aluminum foil linings may also trap heat, causing a fire hazard. This based on safety considerations.

WARNING

To avoid sickness and food waste, do not allow defrosted food to remain in the oven for more than two hours.

Important Safety Instructions

WARNING

To reduce the risk of fire, electrical shock, injury to persons, or damage when using the oven, follow basic precautions, including the following:

- Your unit should be installed by a qualified technician. The appliance must be installed and electrically grounded according to local codes. Have this technician show the the location of the gas shut-off valve on the oven so you know where and how to turn off the gas if necessary.
- Do not attempt to repair or replace any part of this appliance unless specifically recommended in this manual. All servicing should be referred to a qualified technician. A qualified technician is required for any adjustments or conversions to Nat. or LP gas. Warranty service must be performed by an authorized service agency.
- The “push-to-turn” knob of this oven are designed to be child-safe. However, children should not be left alone in the kitchen while the oven is in use. Do not store items of interest to children over the unit.
CAUTION: Children climbing to reach items could be seriously injured.
- GREASE is flammable and should be handled carefully. Do not use water on grease fires. Never pick up a flaming pan. Smother flaming pan by covering utensil completely with well-fitting lid, cookie sheet or flat tray. Flaming grease outside of utensil can be extinguished with baking soda or, if available, a multipurpose dry chemical or foam type extinguisher. Do not allow grease to accumulate around the oven or in vents.
- Wear proper apparel. Loose-fitting or hanging garments should never be worn while using the appliance. Do not drape towels or any materials on oven door handles. These items could ignite and you could get burned.

- Use only dry pot holders. Moist or damp pot holders on hot surfaces may result in burns from steam. Do not let potholder touch hot surface areas. Do not use a towel or other bulky cloth.
- Keep area clean and free from combustible materials, gasoline, and other flammable liquids. Never use your oven as a storage space. Combustible items (paper, plastic, etc.) may ignite and metallic items may become hot and cause burns.
- The oven vent is located at the front of the oven and vents into the room. Oven vents must remain clear and unobstructed.
- Use care when opening oven door. Let hot air or steam escape before removing or replacing food. Hot air or steam can cause burns to hands, face and/or eyes.
- Do not attempt to operate the appliance during power failure.
- Do not heat unopened food containers; buildup of pressure may cause the container to explode and result in injury.
- Never sit, step, stand, or lean on any part of the oven, or injury may result.
- Storage cabinet area above the unit must be 36” (91.4 cm) and cannot project more than 13” (33.0 cm) outward from the rear wall. Beware of potential hazards associated with retrieving items from such cabinets when the unit is in operation.
- Once the unit is installed as outlined in the Installation Instructions, it is important that the fresh air supply is not obstructed. Ensure that the kitchen is well-ventilated. Keep natural venting holes open or install a mechanical ventilation device. Prolonged or intensive use of the appliance may call for additional (such as opening a window) or more effective ventilation (such as increasing the level of a mechanical ventilation if present).

- SAVE THESE INSTRUCTIONS -

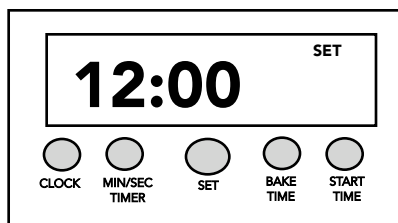
Before You Use Your New Oven

All gas ovens are wiped clean with solvents at the factory to remove any visible signs of dirt, oil, and grease which may have remained from the manufacturing process. Before starting to cook, clean the oven thoroughly with hot soapy water.

Setting the Clock

VGSO100

The time-of-day must be set before any other program can be used. When your oven is first connected to the power in your home, the timer display will show --:--. To program the time-of-day:

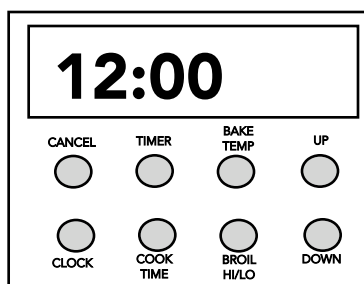


1. Press the CLOCK button. 12:00 will be displayed with the word SET in the upper right corner.
2. Turn the Set Knob until the correct time-of-day is displayed. AM and PM are not indicated.
3. Press the CLOCK button again. The word SET will disappear and the correct time is now set into the timer.

The time-of-day can be changed by following steps 1 through 3. It cannot be changed while there is a Bake Time or Start Time cycle programmed into the timer.

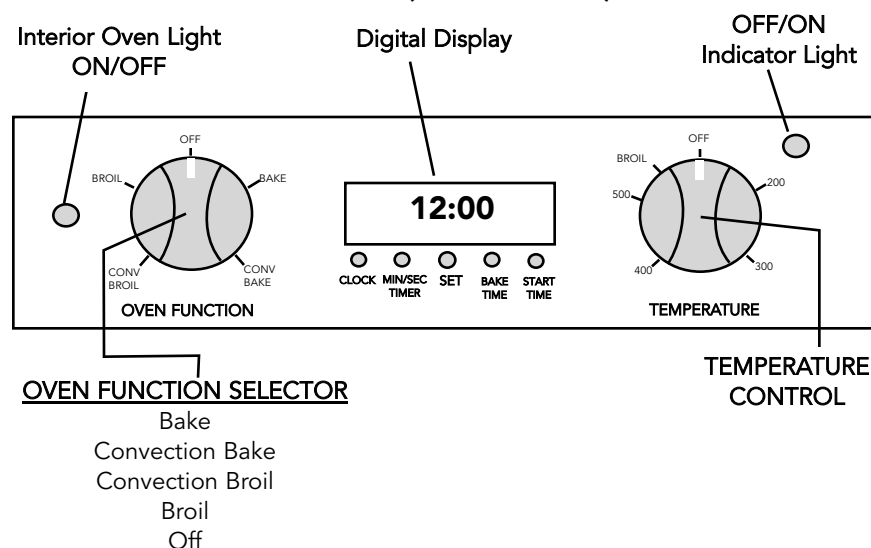
VGSO166

The time-of-day must be set before any programs can be used. When your oven is first connected to the power in your home, the timer display will flash 12:00. The time-of-day can not be changed if any timed modes of operation are not operating. To program the time-of-day:

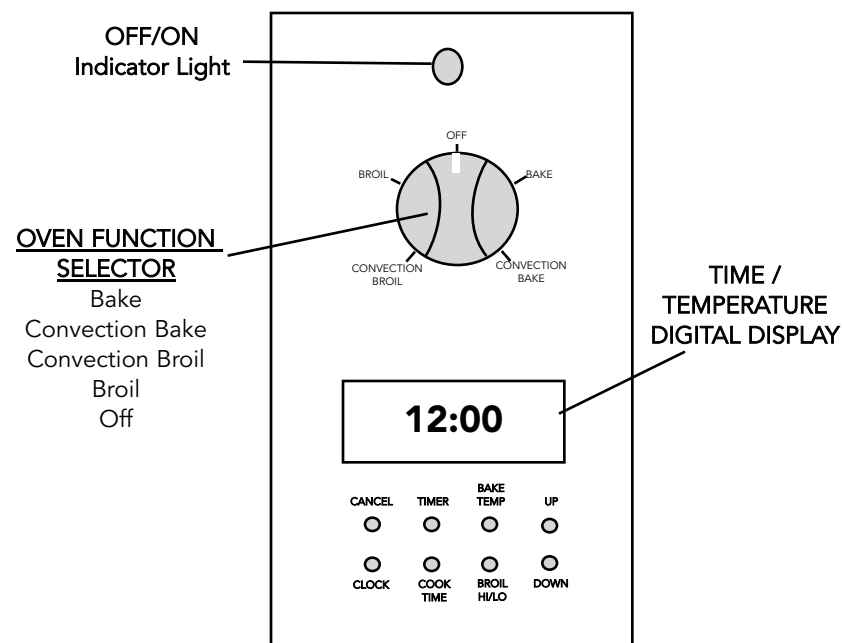


1. Press CLOCK. A single tone will sound and the colon will flash indicating the clock function has been accessed.
2. UP and DOWN are used to set the time of day. UP increases time; DOWN decreases time. Tapping UP/DOWN will increase or decrease the time in 1-minute increments. When the button is held down, time will increase or decrease in 5-minute increments until the next hour is reached, then will continue to increase or decrease in hour increments.
3. Release the button when the appropriate time has been reached.
4. The clock set mode will terminate if the time is not set within 30 seconds of accessing the clock set mode. The colon will stop flashing indicating the clock set mode has been terminated. Pressing CANCEL will also terminate the clock set mode.

Oven Control Panel (VGSO100)

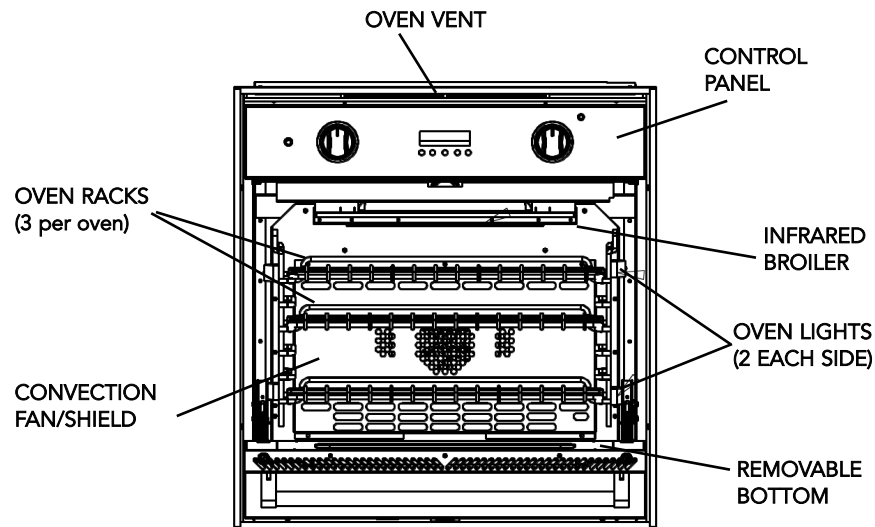


Oven Control Panel (VGSO166)

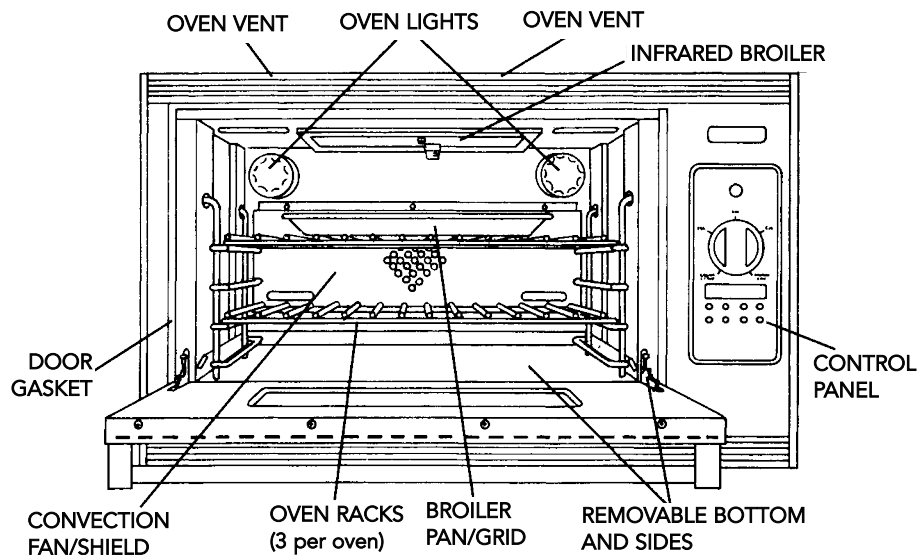


Built-In Gas Oven Features

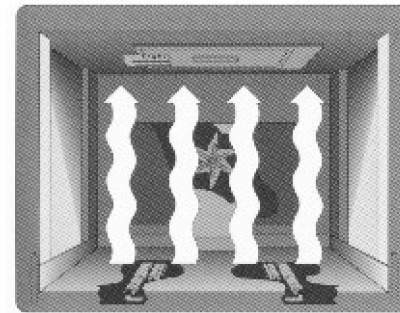
VGSO100



VGSO166

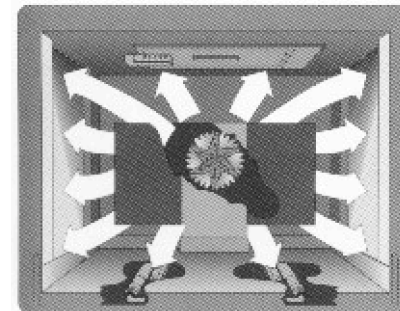


Basic Functions of Your Oven



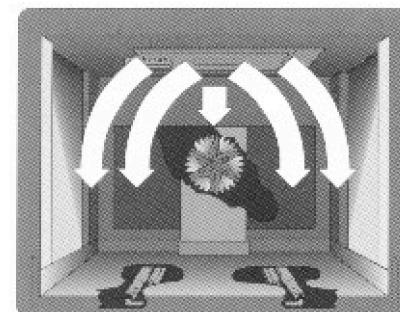
NATURAL AIRFLOW BAKE

Heat is radiated from the two bake burners in the bottom of the oven cavity and is circulated with natural airflow. This is your traditional bake setting.



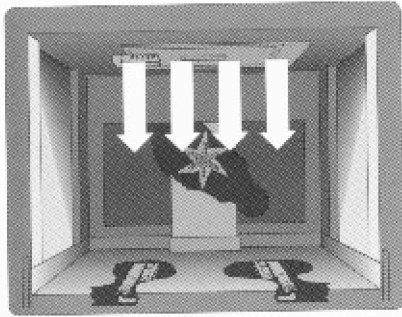
CONVECTION BAKE

Heat is radiated from the bake burners in the bottom of the oven cavity and is circulated by the motorized fan in the rear of the oven. It provides more even heat distribution throughout the oven cavity for all uses. Multiple rack use is possible for the largest baking job. When roasting, cool air is quickly replaced - searing meats on the outside and retaining more juices and natural flavor on the inside with less shrinkage.



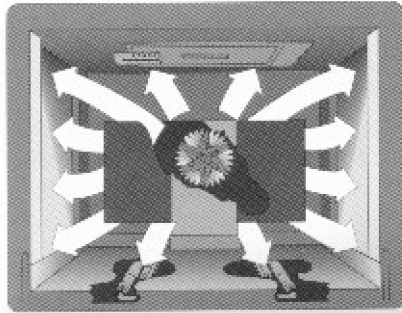
CONVECTION BROIL

The broil burner at the top of the oven heats the metal screen until it glows. The glowing screen produces the infrared heat, searing the outside of broiled foods and sealing in juices. The Gourmet Glow™ infrared broiler produces 1500°F (815.5°C) infrared heat with the additional benefit of air circulation by the motorized fan in the rear of the oven. Smoke is reduced since the airflow reduces peak temperatures on the food. Use this setting for thick cuts of meats.



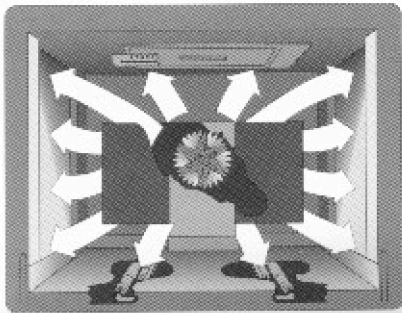
BROIL

The broil burner at the top of the oven heats the metal screen until it glows. The Gourmet Glow™ infrared broiler produces 1500°F (815.5°C) infrared heat quickly searing the outside of broiled foods and sealing in juices.



CONVECTION DEFROST

With the oven function selector set to convection bake and the temperature control off, air is circulated by a motorized fan in the rear of the oven. The fan accelerates natural defrosting of the food without heat. To avoid sickness and food waste, do not allow defrosted food to remain in the oven for more than two hours.



CONVECTION DEHYDRATE

With the selector set to Convection Bake and the temperature control on 200°F (93.3°C), warm air is circulated by a motorized fan in the rear of the oven. Over a period of time, the water is removed from the food by evaporation. Removal of water inhibits growth of microorganisms and retards the activity of enzymes. It is important to remember that dehydration does not improve the quality, so only fresh, top-quality foods should be used.

Clocks and Timers

VGSO100

Electronic Timing Center

The Electronic Timing Center is used to program and control all timing functions. It has five display and programming modes that are activated by the four push buttons and the "SET" knob. Both the Bake Time mode and the Min/Sec Timer mode can be used to time cooking periods.

Setting the MIN/SEC Timer

The MIN/SEC Timer is designed for accurate timing and is ideal for baking delicate items such as biscuits, cookies, and popovers, and for precise broiling. The MIN/SEC timer can be used at the same time the Bake Time or Start Time functions are in use. It can be used for timing up to 12 hours. When setting the Timer, the time displayed will increase in 1 minute increments. When the Timer counts down to 1 minute, the timer alarm will give two short beeps and the display changes from hours:minutes to seconds only.

To program the MIN/SEC Timer

1. Press the MIN/SEC Timer button. The timer will display :00 and the word timer will be displayed in the lower right corner.
2. Turn the SET knob until the desired duration time is displayed.

The Timer is now programmed. The alarm will sound at the end of the countdown. The program can be canceled anytime by setting the remaining time to :00. To change back to the time-of-day, press the CLOCK button. Notice that a small clock will be displayed in the upper right corner to indicate that a program is in progress. The display will return automatically to the MIN/SEC Timer after a few seconds.

Timer Alarm

At the end of a MIN/SEC Timer program or Bake Time program, the alarm will consist of three beeps followed by two beeps every 10 seconds until the MIN/SEC Timer button is pressed. Whenever a valid function key is pressed or when a control function starts automatically, one beep will be sounded. When an invalid function key is pressed, two beeps will be sounded.

Setting the Bake Time Program

The Bake Time program is used for controlled timing of baked or roasted foods. At the end of the timed cycle, the oven automatically turns off. Times in the Bake Hours mode are displayed in hours and minutes, with a setting from 1 minute to 11 hours 59 minutes, increasing in 1 minute increments.

To set the Bake Time program

1. Set the Oven Function Selector to the BAKE or CONVECTION BAKE position, depending upon the type of baking being used.
2. Set the temperature Control knob to the desired temperature and allow for preheating.
3. Press and release the Bake Time button. The Timer will display :00 with the words SET and COOK in the upper right corner of the digital display.
4. Turn the SET Knob until the desired baking time is displayed in hours and minutes. The word COOK will remain in the display indicating that the Bake Time program has been set.

The Timer will automatically compute a stop time and enter it into the timer memory. The alarm will sound three beeps followed by two beeps every 10 seconds until the Bake Time button is pressed. The duration time can be changed anytime during the cooking program by following steps 4 and 5. Setting the remaining duration time to :00 cancels the Bake Time program. To return the Timer to the present time-of-day, press the CLOCK button. A small clock will appear in the upper right corner indicating a Bake Time program has been set. The Timer will go back to the Bake Time automatically after a few seconds.

Setting the Automatic Start Time Bake Program

The Bake Time and Start Time modes of the Timer can be used to automatically turn the oven on and off at a preselected time. The Automatic Time Bake Program is ideal for foods with no danger of spoilage during the time the oven is left off.

To set the Automatic Time Bake program

1. Program the START TIME by pressing the Start Time button and turning the Set Knob until the desired Start Time is displayed. This is the time-of-day you want the food to begin cooking.
2. Program the required baking time by pressing the Bake Time button. The words SET and COOK appear in the upper right corner of the digital display. Turn the SET knob until the desired baking time is displayed in hours and minutes. The word SET will disappear and the word DELAY will remain in the display indicating that the Bake Time program has been set.
3. Set the Oven Function Selector to the BAKE or CONVECTION BAKE position, depending upon the type of baking being used.
4. Set the Temperature Control Knob to the desired temperature.

NOTE: When the specified start time is reached, the oven will automatically turn on. The oven will bake for the programmed amount of time at the selected temperature.

At one minute from the end of the specified bake program, the oven timer will beep once. At the end of the specified bake program, the oven will automatically turn off and the timer will sound a series of three beeps. This will continue until the "start time" button is pressed. The display will then return to displaying the time. Setting the remaining duration time to :00 will also cancel the automatic bake program.

Clocks and Timers

VGSO166

Electronic Timing Center

The Electronic Timing Center is used to program and control all timing functions. There are five modes of operation.

Setting the Minute/Hour Timer

The Minute/Hour timer is designed for accurate timing and is ideal for baking delicate items such as biscuits, cookies, and popovers and for precise broiling.

To set the Minute/Hour timer:

1. Press TIMER once to access the time of day mode. A single tone will sound and 0:00 will appear on the L.E.D. display.
2. The UP and DOWN buttons to set the time. The UP button increases time; the DOWN button decreases time. Tapping UP or DOWN will increase or decrease the time in 1-minute increments. When the UP or DOWN button is held down, time will increase or decrease in 5-minute increments until the next hour is reached, then will continue to increase or decrease in hour increments.
3. Release the button when the appropriate time has been reached.
4. To cancel the timer, press and hold the TIMER button for three seconds.

The TIMER mode will lockout changes and begin to count down if buttons are not pressed for 5 seconds. Pressing TIMER once will allow the timer set time to be changed during the countdown process. The timer can be set from a minimum time of 1 minute to a maximum of 12 hours 0 minutes. When the timer counts down to 1-minute, a single tone will sound indicating the timer will time out in 1-minute. When the timer counts down to 0:00, three tones will sound every 12 seconds until the timer is canceled by pressing the timer for three seconds or until ten minutes has elapsed.

For Immediate Cook

1. Press BAKE TEMP once. A single tone will sound, the bake L.E.D. indicator light in the upper left corner and the bar segments “---” of the display will light prompting the setting of the bake temperature using the UP or DOWN buttons.
2. The temperature will default to 350°F when either UP or DOWN button is pressed. Tapping the buttons will increase or decrease the temperature in 5-degree increments. The temperature will increase or decrease in 25-degree increments when the UP or DOWN button is pressed and held down. The temperature can be set from a low of 170°F to a high of 550°F. When the desired temperature has been reached, a tone will sound indicating the oven has preheated.
3. The oven set temperature will be displayed during the baking process. The oven function selector must be turned to either the BAKE or CONVECTION BAKE position.
4. The bake function may be terminated by pressing the cancel key once.

Setting Timed Cook

The timed cook feature automatically **ends** a cooking function. This feature does not automatically start a cooking function.

1. Press COOK TIME once. A single tone will sound and 0:00 will appear on the L.E.D. display.
2. The UP and DOWN buttons are used to set the timer. UP increases time; DOWN decreases time. Tapping UP or DOWN button will increase or decrease the time in 1-minute increments. When the UP or DOWN button is held down, time will increase or decrease in 5-minute increments until the next hour is reached, then will continue to increase or decrease in hour increments.
3. Release the button when the appropriate time has been reached.

When COOK TIME is set before the BAKE TEMP, the bake L.E.D. indicator light in the upper left corner and the --- of the display will light after 5 seconds prompting the setting of the BAKE TEMP using the buttons. The temperature will default to 350°F when either button is pressed. Tapping the UP or DOWN button will increase or decrease the temperature in 5-degree increments. The temperature will increase or decrease in 25-degree increments when the button is pressed and held down. The temperature can be set from a low of 170°F to a high of 550°F. The oven set temperature and bake indicator light will be displayed during the baking process. The bake function may be terminated by pressing CANCEL once. COOK TIME will be terminated and the time of day displayed if the temperature is not set within 30 seconds. When COOK TIME reaches 0:00 three tones will sound every 12 seconds until the timer is canceled by pressing TIME for three seconds, pressing CANCEL, or until ten minutes has elapsed.

HI/LO Broil

1. Press BROIL HI/LO once. A single tone will sound, the broil indicator light will appear in the lower left corner and "---" will light indicating the broil function has been accessed.
2. Press UP button for high broil or the DOWN button for low broil. HI will appear if the UP button is pressed; LO will appear if the DOWN button is pressed. The oven function selector must be turned to either the BROIL or CONVECTION BROIL position.
3. BROIL will terminate if the HI/LO BROIL is not selected within 30 seconds. BROIL can also be terminated by pressing CANCEL. once.

Kitchen Equivalents and Metrics

<u>Measure</u>	<u>Equivalent</u>	<u>Metric*</u>
1 tablespoon	3 teaspoons	15 mL
2 tablespoons	1 ounce	30 mL
1 jigger	1 1/2 ounces	45 mL
1/4 cup	4 tablespoons	60 mL
1/3 cup	5 tbsp. plus 1 tsp.	80 mL
1/2 cup	8 tablespoons	125 mL
1 cup	16 tablespoons	250 mL
1 pint	2 cups	30 grams
1 pound	16 ounces	454 grams
2.21 pounds	35.3 ounces	1 kilogram

*Rounded for easier measuring

Cooking With Your Oven

Natural Airflow Baking/ Convection Baking

Preheating

Preheating the oven is not necessary when using temperatures below 250°F. When baking items which require temperatures above 250°F, it is extremely important that you preheat the oven.

- When the desired temperature has been reached on the **VGSO100** model, the indicator light will cycle off indicating the oven has been preheated.
- When the desired temperature has been reached on the **VGSO166** model, a tone will sound indicating the oven has preheated.

Natural Airflow Baking

Conventional baking/roasting is particularly suitable for preparing baked goods and foods which vary in surface texture and consistency. Many cookbooks contain recipes to be cooked in the conventional manner. This type of baking is only recommended for single-rack baking.

Convection Baking

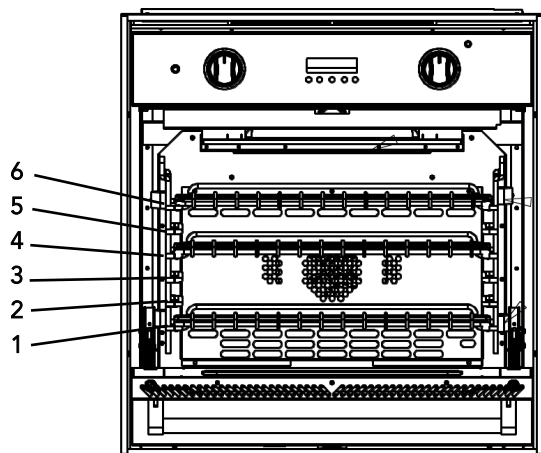
For convection baking, the oven function selector must be turned to CONVECTION BAKE.

Convection baking is the process of cooking food with a flow of heated air circulating throughout the oven cavity. The even circulating of this air equalizes the temperature throughout the oven cavity and eliminates the hot and cold spots found in conventional ovens. This feature can make a significant difference in foods prepared in the oven. A major benefit of convection baking is the ability to prepare food in quantity. The uniform air circulation makes this possible . . . a feature not possible in a standard oven. With this heating system, the air is distributed evenly throughout the oven by the hot air fan. The heat therefore reaches the food to be baked or roasted more quickly. With this heating method, foods can be baked and roasted at the same time with minimal flavor transfer, even when different dishes are involved, such as cakes, fish, or meat.

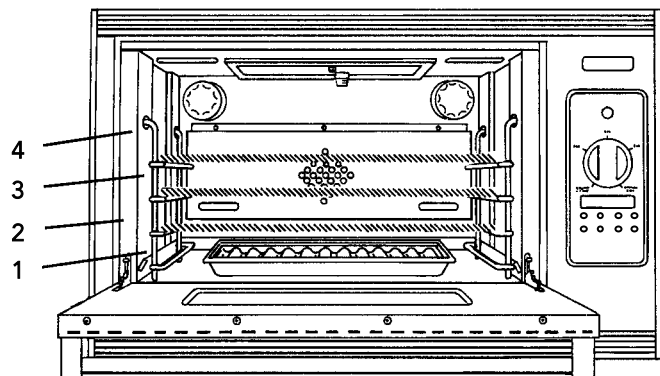
Rack Positions

Each oven is equipped with three tilt-proof racks. The **VGSO100** oven has six rack positions and the **VGSO166** has four. Position 6 (**VGSO100**) or 4 (**VGSO166**) is the farthest from the oven bottom. Position 1 is the closest to the oven bottom. The racks can be easily removed and arranged at various levels. For best results with conventional baking, do not use more than one rack at a time.

VGSO100



VGSO166



To Bake:

1. Arrange the oven racks in the desired position BEFORE heating the oven. If cooking on two racks at the same time, use rack positions 2 and 4 in the **VGSO166** or rack positions 2 and 4 or positions 3 and 5 in the **VGSO100**.
2. Turn the function selector to desired function
3. Set the temperature control to the desired temperature.
4. Place the food in the oven after preheating. Preheating is complete when the oven indicator light goes out on the **VGSO100** or when the tone sounds on the **VGSO166**.

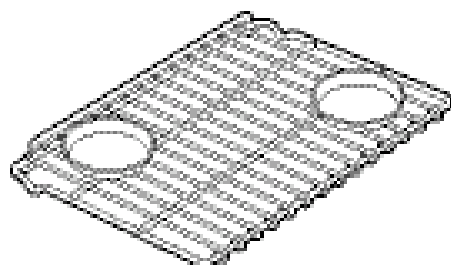
Baking Tips

- As a general rule, to convert conventional recipes to convection recipes, reduce the temperature by 25°F and the cooking time by approximately 10 to 15%.
- Some recipes, especially those that are homemade, may require adjustment and testing when converting from standard to convection modes. If unsure how to convert a recipe, begin by preparing the recipe in conventional bake. After achieving acceptable results, follow the convection guidelines listed for the similar food type. If the food is not prepared to your satisfaction during the first convection trial, adjust only one recipe variable at a time (cooking time, rack position, or temperature) and repeat the convection test. Continue adjusting one recipe variable at a time until satisfactory results are achieved.
- Make sure the oven racks are in the desired positions before you turn the oven on.
- For best results, always preheat the oven.
- Do not open the oven door frequently during baking. If you must open the door, the best time is during the last quarter of the baking time.
- Bake to shortest time suggested and check for doneness before adding more time. For baked goods, a stainless steel knife placed in the center of the product should come clean when done.
- Use good quality baking pans and sizes recommended in the recipe; warped, dented, or burned pans should not be used.
- Shiny metal pans are preferred for baking items such as cakes, cookies, and muffins because they produce light, golden crusts due to heat being reflected by the metal.
- Glass pans may also be used for cake baking. Reduce the oven temperature by 25°F when using a glass pan, but bake for the same amount of time called for in the recipe.
- Pies are best baked in pans which absorb and hold heat. Glass, enamel, dull-finished metal, and porcelain enamel finish give pies a golden brown crust.

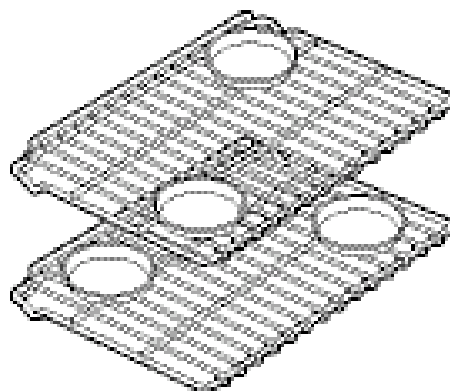
Pan Placement Tips

- When using large (15" x 13" [38 cm x 33 cm]) flat pans or trays that cover most of the rack, rack positions 2 or 3 produce the best results.
- Stagger pans in opposite directions when two racks and several pans are used. No pan should be directly above another.
- Allow 1 1/2" to 2" (3.8 cm to 5.1 cm) of air space around all sides of each pan for even air circulation.
- When baking on more than one rack, it is recommended to use the 2nd and 4th (VGSO166) or 3rd and 5th (VGSO100) position for more consistent even baking.

Single Rack Pan Placement



Multiple Rack Pan Placement



Conventional Baking Chart

	Recommended Pan	Conventional Temperature (°F) (°C)		Conventional Time (min.)
BREADS				
Yeast Loaf	Loaf Pan	375	191	30-35
Yeast Rolls	Cookie Sheet	400	204	12-15
Biscuits	Cookie Sheet	400	204	8-10
Nut Breads	Loaf Pan	375	191	30-35
Cornbread	8"x8" (20x20 cm)	400	204	25-30
Corn Muffins	Muffin Tin	375	191	15-20
Fruit Muffins	Muffin Tin	475	191	15-20
CAKES/COOKIES				
Angelfood	Tube Pan	375	191	35-45
Bundt	Tube Pan	350	177	45-50
Cupcakes	Muffin tin	350	177	16-20
Layer, Sheet	13"x9" (23x33 cm)	350	177	40-50
Layer, Two	9" (23 cm) round	350	177	30-35
Pound	Loaf Pan	350	177	60-65
Brownies	13"x9" (23x33 cm)	350	177	25-30
Choc. Chip	Cookie Sheet	375	191	12-15
Sugar Cookies	Cookie Sheet	350	177	10-12
PIES/PASTRY				
Pie Crust	9" (23 cm) round	425	218	10-12
Two Crust, Fruit	9" (23 cm) round	375	191	55-60
Pumpkin Pie	9" (23 cm) round	375	191	40-45
Custard	6 - 4 oz cups	350	177	35-40
Cream Puffs	Cookie Sheet	400	204	30-35
MISCELLANEOUS				
Baked Potatoes	(4) 8 oz (227 gm)	375	191	60-75
Lasagna	9"x5" (23x13 cm)	375	191	55-60
Cheese Souffle	1 qt. (.95 L)	350	177	45-50
Stuffed Peppers	13"x9" (23x33 cm)	375	191	60-70
Quiche	9" (23 cm) round	400	204	25-30

Convection Baking Chart

	Recommended Pan	Convection Temperature (°F) (°C)		Convection Time (min.)
BREADS				
Yeast Loaf	Loaf Pan	350	177	25-35
Yeast Rolls	Cookie Sheet	375	191	11-13
Biscuits	Cookie Sheet	375	191	7-9
Nut Breads	Loaf Pan	350	177	20-25
Cornbread	8"x8" (20x20 cm)	375	191	15-20
Corn Muffins	Muffin Tin	350	177	10-12
Fruit Muffins	Muffin Tin	450	232	12-15
CAKES/COOKIES				
Angelfood	Tube Pan	325	163	30-35
Bundt	Tube Pan	325	163	35-40
Cupcakes	Muffin tin	325	177	15-17
Layer, Sheet	13"x9" (23x33 cm)	325	163	30-35
Layer, Two	9" (23 cm) round	325	163	25-30
Pound	Loaf Pan	325	163	45-50
Brownies	13"x9" (23x33 cm)	325	163	20-25
Choc. Chip	Cookie Sheet	350	177	9-10
Sugar Cookies	Cookie Sheet	325	163	7-10
PIES/PASTRY				
Pie Crust	9" (23 cm) round	400	204	7-9
Two Crust, Fruit	9" (23 cm) round	350	177	50-55
Pumpkin Pie	9" (23 cm) round	350	177	35-40
Custard	6 - 4 oz cups	Not Recommended		
Cream Puffs	Cookie Sheet	375	191	25-27
MISCELLANEOUS				
Baked Potatoes	(4) 8 oz (227 gm)	350	177	50-55
Lasagna	9"x5" (23x13 cm)	350	177	45-50
Cheese Souffle	1 qt. (.95 L)	325	163	35-40
Stuffed Peppers	13"x9" (23x33 cm)	350	177	45-50
Quiche	9" (23 cm) round	Not Recommended		

Solving Baking Problems

Baking problems can occur for many reasons. Check the chart for the causes and remedies for the most common problems. It is important to remember that the temperature setting and cooking times you are accustomed to using with your previous oven may vary slightly from those required with this oven. If you find this to be true, it is necessary for you to adjust your recipes and cooking times accordingly.

BAKING PROBLEM REMEDIES		
PROBLEM	CAUSE	REMEDY
Food browns unevenly	<ol style="list-style-type: none"> 1. Improper heating 2. Aluminum foil on rack or oven bottom 3. Baking utensils too large for the recipe or oven. 4. Several utensils crowded together 	<ol style="list-style-type: none"> 1. Preheat until desired temperature is reached. 2. Remove foil. 3. Use correct size utensil. 4. Leave at least 1 1/2" (3.8 cm) or more space between all utensils and oven walls.
Food too brown on bottom	<ol style="list-style-type: none"> 1. Baking utensil too large 2. Baking utensil dark or glass 	<ol style="list-style-type: none"> 1. Use correct utensil 2. Lower oven temperature 25°F (-3.8°C) for this type of utensil.
Food dries before browning	<ol style="list-style-type: none"> 1. Oven temperature too high 2. Oven door opened too frequently 	<ol style="list-style-type: none"> 1. Lower oven temperature 2. Check food at minimum time.
Cookies too brown on bottom	<ol style="list-style-type: none"> 1. Pans too deep 2. Dark cookie sheet 3. Oven temperature too high 	<ol style="list-style-type: none"> 1. Use a cookie sheet (not a baking pan). 2. Use light, shiny cookie sheet. 3. Lower oven temperature
Cookies too flat	<ol style="list-style-type: none"> 1. Hot cookie sheet 	<ol style="list-style-type: none"> 1. Allow cookie sheet to cool between batches.
Cake too brown on bottom or crust forms on bottom	<ol style="list-style-type: none"> 1. Oven temperature too high 	<ol style="list-style-type: none"> 1. Lower temperature; if using glass pan, lower 25°F (-3.8 °C).
Cakes burns on sides or not done in center than	<ol style="list-style-type: none"> 1. Oven too hot 2. Wrong pan size 	<ol style="list-style-type: none"> 1. Reduce temperature. 2. Use recommended pan size; fill pan no more 2/3 full.

Infrared Conventional Broiling

The broiler is an in-the-oven infrared broiler design-certified for residential use. The method preferred by professional cooks to sear in the nutrition, flavors, and juices of meat, poultry, and fish is now possible in the home. The infrared broiler cooks up to 50% faster than other methods. Its intense, penetrating heat produces a more attractive, professional finish. The broil burner at the top of the oven heats the metal screen until it glows. The Gourmet Glow™ infrared broiler produces 1500°F (815.5°C) infrared heat quickly searing the outside of broiled foods and sealing in juices.

Broiling is a dry-heat cooking method using direct or indirect radiant heat. It is used for small individualized cuts such as steaks, chops, and patties. Broiling is most successful for cuts 1-2 inches (2.54-5.1 cm) thick. Conventional broiling is also more suitable for flat pieces of meat.

VGSO166 broiler features a HI and LO broil function. The LO broil function should be used for slow broiling since the unit will cycle on and off frequently. The HI broil function should be used for fast broiling as the unit will cycle less frequently.

Infrared Convection Broiling

Convection broiling has the advantage of broiling food slightly quicker than conventional. Convection broiling of meats produces better results especially for extra thick cuts. The meat sears on the outside and retains more juices and natural flavor inside with less shrinkage.

To use the Infrared Broiler:

VGSO100

1. Arrange the oven racks in the desired position.
2. Center food on cold broiler pan and grid supplied with your oven. Place broiler pan in oven and close the door.
3. Set the oven function selector to either BROIL or CONVECTION BROIL.

VGSO166

1. Arrange the oven racks in the desired position.
2. Center food on cold broiler pan and grid supplied with your oven. Place broiler pan in oven and close the door.
3. Set the oven function selector to either BROIL or CONVECTION BROIL.
4. Press BROIL. Press the UP button for high broil or the DOWN button for low broil. HI or LO will appear depending on which button is pressed.

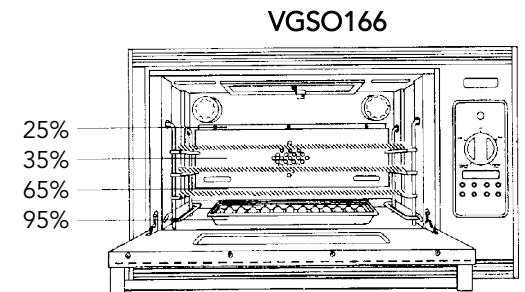
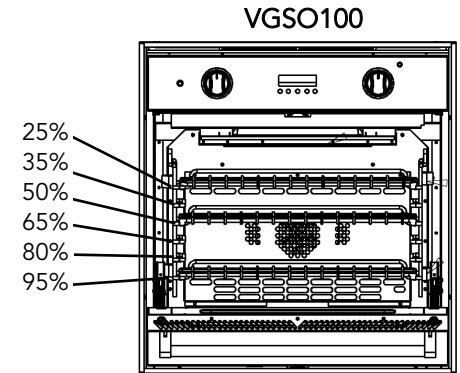
Rack Positions:

The broiler uses infrared heat rays to help cook the food. Because these rays can travel only in straight lines, the effective cooking area of the broiler is reduced when using the higher rack positions. At high rack positions, the rays cannot reach all corners of the broiler grid, so larger pieces of meat might not broil sufficiently at the outer edges.

In the VGSO100, position 6 is the closest to the broiler and position 1 is the closest to the oven bottom.

In the VGSO166, position 4 is the closest to the broiler and position 1 is the closest to the oven bottom.

Note the approximate effective cooking areas on the broiler grid for each rack position.



Broiling Tips

- Always use a broiler pan and grid for broiling. They are designed to provide drainage of excess liquid and fat away from the cooking surface to help prevent spatter, smoke and fire.
- Place broiler pan with food in recommended rack position.
- To keep meat from curling, slit fatty edge.
- Brush chicken and fish with butter several times as they broil to prevent drying out. To prevent sticking, lightly grease broiler grid.
- Broil on first side for slightly more than half the recommended time, season and turn. Season second side just before removing.
- Always pull rack out to stop position before turning or removing food.
- Use tongs or a spatula to turn meats. Never pierce meat with a fork as this allows the juices to escape.
- Remove the broiler pan from the oven when you remove the food. Drippings will bake onto the pan if it is left in the heated oven after broiling. While pan is hot, place damp paper towel over grid. Drizzle with liquid dishwashing detergent and pour water over grid. This will make cleaning of the pan easier, or the broiler pan can be lined with aluminum foil to make cleaning easier. Be sure the foil extends up the side of the pan. Although it is not recommended, the grid can also be covered with foil. Be sure to slit openings to conform with the openings in the grid so melted fat can drain through to prevent spattering, smoking or possibility of grease fire.

Conventional/Convection Broiling Chart

Type and Cut of Meat	Weight	Rack	Conventional Time (Min.)	Convection Time (Min.)
BEEF				
Sirloin, 1"	12 oz	5		
•Rare			9	7
•Medium			11	9
•Well-done			14	11
T-Bone, 3/4"	10 oz	5		
•Rare			7	5
•Medium			9	7
•Well-done			11	9
Hamburger, 1/2"	4 oz.	5		
•Rare			7	4
•Medium			9	7
•Well-done			11	9
CHICKEN				
Bnls Breast	1lb	4	18	15
Bone-in Breast	2 - 2 1/2 lb.	4	20	18
Quarters	2 - 2 1/2	4	18	15
HAM				
Ham slice, 1"	1lb.	4	22	18
LAMB				
Rib Chops	12 oz.	4	9	7
Shoulder	1lb.	4	7	6
PORK				
Loin Chops, 3/4"	1lb.	4	14	12
Bacon	1 lb.	4	8	6
FISH				
Salmon Steak	1 lb.	4	9	7
Filletts	1 lb.	4	8	6

Convection Defrosting

1. Place the frozen food on a baking sheet.
2. Turn the oven function selector to "CONVECTION BAKE".
3. Do not set a bake temperature*.

*IMPORTANT:

Do not set the bake temperature. Turning the convection fan on will accelerate the natural defrosting of the food without the heat.

! WARNING

To avoid sickness and food waste, do not allow defrosted food to remain in the oven for more than two hours.

Convection Dehydrate

This oven is designed not only to cook, but also to dehydrate fruits and vegetables.

1. Prepare the food as recommended.
2. Arrange the food on drying racks (not included with the oven; contact a local store handling speciality cooking utensils).
3. Set the appropriate "low" temperature and turn the selector to Convec. Bake.

Cleaning and Maintenance

! WARNING

Burn or Electrical Shock Hazard

Make sure all controls are OFF and oven is COOL before cleaning. Failure to do so can result in burns or electrical shock.

Any piece of equipment works better and lasts longer when maintained properly and kept clean. Cooking equipment is no exception. Your oven must be kept clean and maintained properly.

Oven Surfaces

Several different finishes have been used in your electric oven. Cleaning instructions for each surface are given below. NEVER USE AMMONIA, STEEL WOOL PADS OR ABRASIVE CLOTHS, CLEANSERS, OVEN CLEANERS, OR ABRASIVE POWDERS. THEY CAN PERMANENTLY DAMAGE YOUR OVEN.

Control Knob

MAKE SURE THE CONTROL KNOB POINTS TO THE OFF POSITION BEFORE REMOVING. Pull the knob straight off. Wash in detergent and warm water. Do not soak the knob. Dry completely and replace by pushing firmly onto stem. DO NOT USE any cleaners containing ammonia or abrasives. They could remove the graphics from the knob.

Stainless Steel Parts

All stainless steel parts should be wiped regularly with hot, soapy water at the end of each cooling period and with liquid stainless steel cleaner when soapy water will not do the job. **Do not use** steel wool, abrasive cloths, abrasive cleaners, or powders. If necessary to scrape stainless steel to remove encrusted materials, soak the area with hot towels to loosen the material, then use a wooden or nylon spatula or scraper. **Do not use a metal knife, spatula, or any other metal tool to scrape stainless steel.** For occasional heavy cleaning use, a cleaner such as Liquid Zud can be used according to package directions. Do not permit citrus or tomato juice to remain on stainless steel surface, as citric acid will permanently discolor stainless steel. Wipe up any spills immediately.

Glass Surface

Clean with detergent and warm water. Glass cleaner can be used to remove fingerprints. If using glass cleaner ammonia, make sure that it does not run down on exterior door surface.

Brass Parts

CAUTION: All brass special ordered parts are coated with an epoxy coating. **DO NOT USE BRASS OR ABRASIVE CLEANERS ON THE BRASS OPTION PARTS.** All brass parts should be wiped regularly with hot soapy water.

Broiler

There is no special care required for the infrared broiler. It is designed as self-contained unit, and no adjustments or cleaning are possible. Do not attempt to clean it. Its own operation burns off any impurities which may condense on it.

Broiler Pan and Grid

Clean the broiler pan and grid after each use with detergent and hot water. For stubborn spots, use a soap-filled steel wool pad. The broiler pan and grid is also dishwasher safe.

Oven Racks

Clean with detergent and hot water. Stubborn spots can be scoured with a soap-filled steel wool pad.

Replacing Interior Oven Lights

⚠ CAUTION

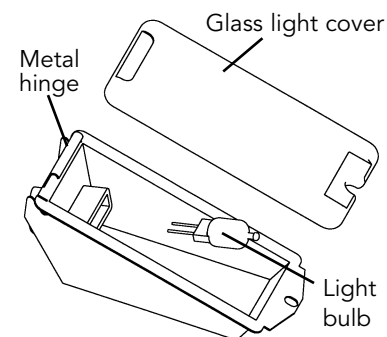
Electrical Shock Hazard

Disconnect the electric power at the main fuse or circuit breaker before replacing bulb.

VGSO100 Halogen Lights

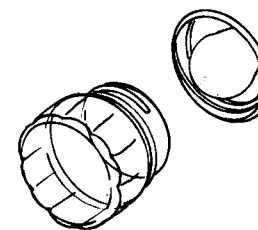
Do not touch bulb with bare hands. Clean any signs of oil off of the bulb and handle with a soft cloth.

1. Unsnap glass light cover at opposite end from metal hinge.
2. Firmly grasp light bulb and pull out.
3. Replace with a 12V-25W bulb.
4. Replace the light cover by first sliding into metal hinge and then snapping close on opposite end.
5. Reconnect power at the main fuse or circuit breaker.



VGSO166

1. Unscrew glass light cover.
2. Use an oven mitt during bulb removal to protect your hand in case the bulb breaks.
3. Replace the bulb with a 120 volt, 40-watt appliance bulb.
4. Replace the light cover
5. Reconnect power at the main fuse or circuit breaker.



Power Failure

Since this oven uses electronic ignition, electrical power failure in the home will affect the oven. During a power failure, electric igniters will not work and the oven cannot be used. Momentary power failures can occur unnoticed. The oven is affected only when the power is interrupted. When power is restored, the oven will be fully useable. A "brown-out" may or may not affect the oven's operation, depending upon the severity of the power loss. **If power loss or brown-out is suspected, do not use the oven until electrical service is restored.**

Troubleshooting Guide

VGSO100

PROBLEM	POSSIBLE CAUSE AND/OR REMEDY
1. Oven will not function.	Oven is not connected to electrical power. Have electrician check power circuit breaker, wiring and fuses.
2. Broil does not work.	Temperature control knob is rotated too far past broil position.
3. Oven light will not work.	Light bulb is burned out. Oven is not connected to power.
4. Strong odor and/or smoke is noticed first few times oven is used.	This is normal burn off of insulation and protective oils in oven. This will go away after using oven a few times.

VGSO166

PROBLEM	POSSIBLE CAUSE AND/OR REMEDY
1. Oven will not function.	Oven is not connected to electrical power. Have electrician check power circuit breaker, wiring and fuses.
2. Broil does not work.	HI/LO setting has not been set using UP or DOWN button.
3. Oven light will not work.	Light bulb is burned out. Oven is not connected to power.
4. Service Codes appear in digital display.	Disconnect electrical supply to the oven and call an authorized servicier.
5. Strong odor and/or smoke is noticed first few times oven is used.	This is normal burn off of insulation and protective oils in oven. This will go away after using oven a few times.

Service Information

If service is required after checking the troubleshooting guide:

1. Call your dealer or authorized service agency. The name of the authorized service agency can be obtained from the dealer or distributor in your area.
2. Have the following information readily available:
Model Number
Serial Number
Date of Purchase
Name of dealer from whom purchased
3. Clearly describe the problem that you are having.

If you are unable to obtain the name of an authorized service agency, or if you continue to have service problems, contact Viking Range Corporation at (888)845-4641 or write to:

VIKING RANGE CORPORATION
PREFERRED SERVICE
111 Front Street
Greenwood, Mississippi 38930 USA

Record the following information indicated below. You will need it if service is ever required. The serial number and model number for your oven is located behind the lower access panel.

Model Number _____ Serial Number _____

Date of Purchase _____ Date Installed _____

Dealer's Name _____

Address _____

Please retain this manual for future reference.

**PROFESSIONAL SERIES
BUILT-IN GAS OVENS WARRANTY**

ONE YEAR FULL WARRANTY

Built-in gas ovens (VGSO Series) and all of their component parts, except as detailed below*, are warranted to be free from defective materials or workmanship in normal household use for a period of twelve (12) months from the date of original retail purchase. Viking Range Corporation, warrantor, agrees to repair or replace, at its option, any part which fails or is found to be defective during the warranty period.

*Painted and decorative items are warranted to be free from defective materials or workmanship for a period of ninety (90) days from the date of original retail purchase. ANY DEFECTS MUST BE REPORTED TO THE SELLING DEALER WITHIN NINETY (90) DAYS FROM DATE OF ORIGINAL RETAIL PURCHASE.

Viking Range Corporation uses the most up-to-date processes and best materials available to produce all color finishes. However, slight color variation may be noticed because of the inherent differences in painted parts and porcelain parts as well as differences in kitchen lighting, product locations, and other factors.

FIVE YEAR LIMITED WARRANTY

Any oven tubular burner which fails due to defective materials or workmanship in normal household use during the second through fifth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

TEN YEAR LIMITED WARRANTY

Any porcelain oven or porcelain inner door panel which rusts through due to defective material or workmanship in normal household use during the second through the tenth year from the date of original retail purchase will be repaired or replaced, free of charge for the part itself, with the owner paying all other costs, including labor.

NINETY (90) DAY RESIDENTIAL PLUS WARRANTY This warranty applies to applications where use of the product extends beyond normal residential use. Examples are, but not limited to, bed and breakfasts, fire stations, private clubs, churches, etc. This warranty excludes all commercial locations such as restaurants, food service locations, and institutional food service locations.

This warranty extends to the original purchaser of the product warranted hereunder and to each transferee owner of the product during the term of the warranty.

This warranty shall apply to products purchased and located in the United States and Canada. Products must be purchased in the country where service is requested. Warranty labor shall be performed by an authorized Viking Range Corporation service agency or representative. Warranty shall not apply to damage resulting from abuse, accident, natural disaster, loss of electrical power to the product for any reason, alteration, outdoor use, improper installation, improper operation, or repair or service of the product by anyone other than an authorized Viking Range Corporation service agency or representative. This warranty does not apply to commercial usage. Warrantor is not responsible for consequential or incidental damage whether arising out of breach of warranty, breach of contract, or otherwise. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Owner shall be responsible for proper installation, providing normal care and maintenance, providing proof of purchase upon request, and making the appliance reasonably accessible for service. If the product or one of its component parts contains a defect or malfunction during the warranty period, after a reasonable number of attempts by the warrantor to remedy the defects or malfunctions, the owner is entitled to either a refund or replacement of the product or its component part or parts. Warrantor's liability on any claim of any kind, with respect to the goods or services covered hereunder, shall in no case exceed the price of the goods or service or part thereof which gives rise to the claim.

WARRANTY SERVICE: Under the terms of this warranty, service must be performed by a factory authorized Viking Range Corporation service agent or representative. Service will be provided during normal business hours, and labor performed at overtime or premium rates shall not be covered by this warranty. To obtain warranty service, contact the dealer from whom the product was purchased, an authorized Viking Range Corporation service agent, or Viking Range Corporation. Provide model and serial number and date of original purchase. For the name of your nearest authorized Viking Range Corporation service agency, call the dealer from whom the product was purchased or Viking Range Corporation.

IMPORTANT: Retain proof of original purchase to establish warranty period.

The return of the Owner Registration Card is not a condition of warranty coverage. You should, however, return the Owner Registration Card so that Viking Range Corporation can contact you should any question of safety arise which could affect you.

Any implied warranties of merchantability and fitness applicable to the above described oven tubular burner, porcelain oven, or porcelain inner door panel are limited in duration to the period of coverage of the applicable express written limited warranties set forth above. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which may vary from jurisdiction to jurisdiction.

Specifications subject to change without notice.

